

REMARKS

In the Office Action of February 2, 2004, claims 1-20 were presented and each of those claims were rejected. In response, applicant amends claims 1 and 10 and requests reconsideration and withdrawal of all rejections.

Claim Rejections - 35 U.S.C. §112

Claims 1 and 10 were rejected as being indefinite because the claims each stated that the impulse response of an processor is stored for at least two impulses. Claims 1 and 10 are corrected to state that an impulse response is stored for each of at least two impulses. Accordingly, this rejection has been overcome and should be withdrawn.

Claim Rejections - 35 U.S.C. §102

Claims 1-4, 9-13 and 18-20 have been rejected under 35 U.S.C. §102(e) as anticipated by Ando et al. Reconsideration is requested.

The Office Action asserts that in Fig. 2, Ando teaches the invention of the independent claims and most of the dependent claims. Specifically, it indicates that Ando teaches a reverberation-imparting apparatus comprising a coefficient processing portion which stores at least two impulse responses, a coefficient change control portion for assessing a characteristic of an input signal and a convolution portion for applying an impulse response to the input signal to derive an output signal. Further, the coefficients in coefficient processing portion 30 are shifted, so that a different impulse response is selected, according to the amplitude of the input signal. Notwithstanding any of those statements, Ando does not anticipate claims 1 and 10 because Ando does not disclose, among other things, the storing of *multiple* impulse responses. Fig. 1 of Ando clearly shows a *single* impulse response and Fig. 2, to which the Examiner refers, does not show any further impulse responses being employed. While the Examiner has written "impulse responses" on the copy of the reference mailed by the Office, next to the coefficient processing portion 30 of Fig. 2, this is clearly incorrect! There is no basis for the use of the plural wording "responses". That coefficient processing portion 30 stores the coefficients relating to a *single* impulse response.

The Office Action suggests that the shifting of the coefficients in coefficient processing portion 30 results in a different impulse response being selected according to the amplitude of the input signal. Again, this is off point. In the claimed invention, two or more impulse responses are obtained by applying two or more impulses of different amplitudes to the audio effect processor, and their responses are stored. By contrast, in Ando, different *parts* of a *single* impulse response are selected in dependence on the amplitude of the input. The selected coefficients will be different from those produced by storing different impulse responses for impulses having different input characteristics, such as amplitude. Thus, the Ando system would not be suitable for the purposes of the present invention. For example, Ando could not be used for simulating asymmetrical responses for equal-amplitude positive and negative impulses. Ando does not disclose or teach that the two impulse responses are obtained by applying more than one impulse to the audio effect processor. Manifestly, therefore, the claimed invention is neither taught nor suggested by Ando. As clarified, claims 1 and 10 clearly distinguish over this reference. The rejection therefore should be withdrawn.

Claim Rejections – 35 U.S.C. §103

Claims 8 and 17 have been rejected as obvious over Ando et al. in view of Su et al. Further, claims 5-7 and 14-16 have been rejected as obvious over Ando et al. in view of Higashi. Reconsideration is requested.

Firstly, as noted above, claims 1 and 10, being the independent claims, are patentable. The rejection of the above-listed dependent claims as obvious is thus moot.

Nevertheless, Applicant further notes that the deficiencies in Ando are not cured by the secondary references. For example, not only is an objective of the present invention, a system in which the behavior of non-linear models may be sampled and simulated, not met by Ando but also such deficiency in Ando is not cured by the secondary references (even if we assume that those secondary references could properly be combined with Ando, which Applicant does not concede). Ando addresses solely the achievement of an affect of a longer convolution by ignoring samples below a threshold. By contrast, claim 1 relates to a method wherein devices respond differently to different amplitudes and characteristics of stimulation, wherein the different multiple impulse responses are sampled and applied according to the characteristics of

the incoming audio data. The sampling process may be applied to original devices sampled with more than one setting to simulate the use of a user-controlled variable for selection between the multiple originally sampled settings. Ando simply is not suitable for such a purpose. Without the storage of multiple different impulse responses, no selection between the stored impulse responses can be made.

In other words, even if one were to make the suggested combinations of references, one would not arrive at the claimed invention.

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- 9 -


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CONCLUSION

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicant's attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,
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